THE
ANATOMICAL RECORD

MANAGING EDITOR

CHARLES M. GOSS
Louisiana State University

ASSOCIATE EDITORS

WILLIAM U. GARDNER
Yale University

NORMAND L. HOERR
Western Reserve University

GORDON H. SCOTT
Wayne University

WILLIAM W. GREULICH
Stanford University

THOMAS E. HUNT
University of Alabama

RAYMUND L. ZWEMER
Library of Congress

VOLUME 107

MAY, JUNE, JULY, AUGUST

1950

PUBLISHED BY

THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY

PHILADELPHIA, PA.

CATALOGUED
DEC 27 1950
G.G.Q.

BOSTON
DEC 28 1950
MEDICAL LIBRARY

CONTENTS

No. 1 MAY 1950

W. Lane Williams. Intravital staining of damaged liver cells. II. The use of dyes in the study of necrosis and repair following acute chemical injury. Twelve figures 1

S. S. Stahl, J. P. Weinmann, I. Schour and A. M. Budy. The effect of estrogen on the alveolar bone and teeth of mice and rats. Seven figures 21

David Kazzaz and William M. Shanklin. The coronary vessels of the dog demonstrated by colored plastic (vinyl acetate) injections and corrosion. Three figures 43

Heyl Gremmer Tebo and Ira Rockwood Telford. An analysis of the variations in position of the mental foramen. Two figures 61

T. U. H. Ellinger, R. M. Wotton and I. J. Hall. A report on the occurrence of a median eye in a partially dicephalic cat. Two figures 67

R. M. Wotton, T. U. H. Ellinger and J. C. Bartone. A lipase reaction in phagocytes from the peritoneum of rats toward previously stained fat. Three figures 73

William Montagna and Herman B. Chase. Redifferentiation of sebaceous glands in the mouse after total extirpation with methylcholanthrene. Six figures 83

Simon B. Chandler. Studies on the inguinal region. III. The inguinal canal. Two figures 93

Book Review:

Geoffrey H. Bourne. "The Mammalian Adrenal Gland." *Reviewed by* Raymund L. Zwemer 103

No. 2 JUNE 1950

ELLIOTT S. HARRIS. The sites of alkaline phosphatase in dentinogenesis. Eight figures 105

JOHN R. RING. Changes in alkaline phosphatase activity of rat vaginal epithelium during the estrous cycle. Twelve figures 121

STATA NORTON, HAROLD R. WOLFE AND JAMES F. CROW. Effect of injections of soluble antigen on the spleen size and antibody production in chickens. Two figures 133

LEONARD-F. BÉLANGER. A method for routine detection of radio-phosphates and other radioactive compounds in tissues. The inverted autograph. Six figures 149

OLIVER P. PEARSON. The submaxillary glands of shrews. Five figures 161

GEORGE G. ROWE. Anomalous vertebrae from the lumbosacral column of man. Three figures 171

C. A. SWINYARD, DAVID A. DOLOWITZ, W. SELIGER AND BENJAMIN B. KAMRIN. The use of dental acrylic in the preparation of pressure injection casts of the auditory apparatus and paranasal sinuses 181

DAVID E. DAVIS AND OCTAVIA HALL. Polyovuly and anovular follicles in the wild Norway rat. Two figures 187

BUNSUKE OSOGOE. Transplantation of hematopoietic tissues into the circulating blood. I. Experiments with lymph nodes in normal rabbits. Fourteen figures 193

No. 3 JULY 1950

J. L. WIERDA. A comparison of the weight of the intestine with the body and kidney weights in rats which were fed artificial, unbalanced diets 221

D. S. CHOWDHARY. A note on the carotid body and carotid sinus of Varanus monitor. Three figures 235

W. E. SULLIVAN, O. A. MORTENSEN, M. MILES AND L. S. GREENE. Electromyographic studies of M. biceps brachii during normal voluntary movement at the elbow. Two figures 243

Robert D. Ray, C. Willet Asling, Miriam E. Simpson and Herbert M. Evans. Effects of thyroxin injections on growth and differentiation of the skeleton of hypophysectomized female rats. Seven figures 253

Arnolda W. V. van Dorp and Helen Wendler Deane. A morphological and cytochemical study of the postnatal development of the rat's adrenal cortex. Sixteen figures 265

Murray L. Barr, Lee Fraser Bertram and Hugh A. Lindsay. The morphology of the nerve cell nucleus, according to sex. Twelve figures 283

Hermann Becks, Robert O. Scow, Miriam E. Simpson, C. Willet Asling, Choh Hao Li and Hebert M. Evans. Response by the rat thyro-parathyroidectomized at birth to growth hormone and to thyroxin given separately or in combination. III. Skeletal changes; tibia, metacarpal, and caudal vertebrae. Thirty figures 299

Ernst Scharrer. A technique for the demonstration of the blood vessels in the developing central nervous system. Four figures 319

H. W. Beams, T. C. Evans, Walter W. Baker and Verne van Breemen. Electron micrographs of the amphiaster in the whitefish blastula (Coregonus cluperformis). Nine figures 329

No. 4 AUGUST 1950

Joseph D. Feldman. Histochemical reactions of adrenal cortical cells 347

Roy G. Williams and Brooke Roberts. An improved tantalum chamber for prolonged microscopic study of living cells in mammals. Six figures ... 359

Wang Chi-Min. An anomalous muscle in place of the stylohyoid ligament of a Chinese. Two figures 375

Albert I. Lansing and Donald L. Opdyke. Histological and histochemical studies of the nipples of estrogen treated guinea pigs with special reference to keratohyalin granules. Twelve figures 379

C. Willet Asling, Miriam E. Simpson, Choh Hao Li and Herbert M. Evans. Differences in the response to growth hormone of the rat's proximal and distal tibial epiphyses 399

A. M. Lassek. With the technical assistance of S. Lunetta. A study of the precipitating effects of basic fixing solutions 409

Otto F. Kampmeier and Ralph F. Bouldin. Sectioning the human brain with reference to the Frankfurt plane. Five figures 415

Barbara Granger and Richard F. Baker. Electron microscope investigation of the striated border of intestinal epithelium. Eight figures 423

Harvey Mendelow and James B. Hamilton. A new technique for rapid freezing and dehydration of tissues for histology and histochemistry. One figure 443